

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed July 1, 2004. At the time of the Office Action, Claims 1-22 were pending in the Application. Claims 1-10 and 12-22 stand rejected.

Allowable Subject Matter

Applicants note with appreciation the allowance of Claim 11.

Section 112 Rejections

The Examiner rejects Claims 1-10 and 12-20 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Applicants have amended Claims 1, 16, and 19 to delete the language causing the Examiner's rejection and to add new language which should not be objectionable to the Examiner. Reconsideration and allowance of these claims are respectfully requested.

Section 102 Rejections

The Office Action rejects Claims 1, 3-4, 6, 16 and 19 under 35 U.S.C. § 102(b) as being anticipated by PCT Publication No. WO 98/47255 to Ester et al. ("*Ester*"). Furthermore, the Office Action rejects Claims 1, 3-4, 6, 16 and 19 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,249,510 to Thompson ("*Thompson*").

Claim 1, as amended, includes the following limitations:

an optical drop coupler coupled between said optical input terminal and said demultiplexer, said optical drop coupler being operable to forward a first copy of said input signal to said demultiplexer and to drop a second copy of said input signal; and

one or more drop terminals each operable to receive a respective one of said optical component signals included in said second copy of said optical signal dropped by said optical drop coupler.

Claim 16 recites similar limitations (and Claim 19 has been cancelled).

The Examiner has previously made section 103 rejections of somewhat similar limitations in conjunction with Claim 21. Therefore, the references used to reject Claim 21 will be addressed in conjunction with amended Claims 1 and 16 (instead of the section 102 rejections above, which Applicants believe to be no longer relevant). In two different rejections of Claim 21, the Examiner has attempted to combine a reference teaching the switching of an optical signal between different spans of an optical network with a reference teaching the use of optical couplers. However, the Examiner has provided no reference that teaches both of these features (much less the specific features recited in Claims 1 and 16). Instead, the Examiner has argued that there is a suggestion to combine these references. However, Applicants submit that the Examiner has failed to provide the required evidence of such a suggestion to combine.

In order to establish a *prima facie* case of obviousness, three requirements must be met: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge available to one skilled in the art, to modify a reference or combine multiple references; (2) there must be a reasonable expectation of success; and (3) the prior art reference (or combination of references) must teach or suggest all of the claim limitations. M.P.E.P. § 2143. In the present case, a *prima facie* case of obviousness cannot be maintained at least because the Examiner has failed to provide a suggestion or motivation to combine the references used by the Examiner in at least one of the rejections of Claim 21 (again, assuming the Examiner would use the same reference combination to reject amended Claims 1 and 16). Furthermore, with respect to at least the other rejection of Claim 21, the combination of references in that rejection does not teach all of the claim limitations of amended Claims 1 and 16.

With respect to the later contention, the Examiner's combination of *Thompson* and U.S. Patent 5,903,371 to Arecco ("*Arecco '371*"), Applicants submit that neither *Thompson* nor *Arecco '371* disclose an optical coupler "operable to forward a first copy of said input signal to said demultiplexer and to drop a second copy of said input signal." As recognized by the Examiner, *Arecco '371* merely discloses a splitter that drops a telemetry channel from an input signal. It does not forward a first copy of the input signal and drop a second copy of

the input signal. It simply splits the telemetry channel from the input signal. For at least this reason, the combination of *Thompson* and *Arecco '371* does not teach each and every limitation of amended Claims 1 and 16.

In addition, a *prima facie* case of obviousness also cannot be maintained with respect to the combination of U.S. Patent 6,285,479 to Okazaki, et al. ("*Okazaki*") and U.S. Patent 6,163,527 to Ester, et al. ("*Ester '527*") (which are also used to reject Claim 21) because the Examiner has failed to provide a suggestion or motivation to combine these references. The M.P.E.P. sets forth a strict legal standard for finding obviousness based on a combination of references. According to the M.P.E.P., "Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge [that was] generally available to one of ordinary skill in the art" at the time of the invention. M.P.E.P. § 2143.01. The "fact that references can be combined or modified does not render the resultant combination [or modification] obvious unless the prior art also suggests the desirability of the combination" or modification. *Id.* (emphasis in original).

The governing Federal Circuit case law makes this strict legal standard even more clear.¹ According to the Federal Circuit, "a showing of a suggestion, teaching, or motivation to combine . . . prior art references is an essential component of an obviousness holding." *In re Sang-Su Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002) (quoting *Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000)). "Evidence of a suggestion, teaching, or motivation . . . may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, the nature of the problem to be solved." *In re Dembiczak*, 175 F.3d 994, 999 (Fed. Cir. 1999). However, the "range of sources available . . . does not diminish the requirement for actual evidence." *Id.* In *In re Dembiczak*, the Federal Circuit reversed a finding of obviousness by the Board of Patent Appeals and Interferences, explaining that proper evidence of a teaching, suggestion,

¹ Note M.P.E.P. 2145(X)(C) ("The Federal Circuit has produced a number of decisions overturning obviousness rejections due to a lack of suggestion in the prior art of the desirability of combining references.").

or motivation to combine is essential to avoid impermissible hindsight reconstruction of an applicant's invention:

Our case law makes clear that the best defense against the subtle but powerful attraction of hind-sight obviousness analysis is *rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references*. Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.

175 F.3d at 999 (quoting *W.L. Gore & Assoc., Inv. v. Garlock, Inc.*, 721 F.2d 1540, 1553 (Fed. Cir. 1983)) (emphasis added) (citations omitted).²

In the present case, the Examiner is improperly using the Applicant's disclosure as a blueprint for piecing together various elements of the cited references. For example, in the rejection of Claim 21 in light of *Ester* and *Okazaki*, the Examiner states that the proposed combination is proper for the following reason:

One of ordinary skill in the art would have been motivated to combine the teaching of *Ester et al.* with the ADM of *Okazaki et al.* because some failure may only affect certain wavelength range. In such case, an individual channel switching is more effective than a span or ring switching. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use switches between the demultiplexer and multiplexer for individual wavelength protection switching as taught by *Ester et al.*, in the ADM of *Okazaki et al.* because an individual channel switching is more effective for failures that only affect certain wavelength range.

However, whether or not the proposed combination would be effective is not evidence of a suggestion to combine. Again, as emphasized in both the case law and in the M.P.E.P., simply because references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” *See, e.g.*, M.P.E.P. § 2143.01. In the present case, the Examiner has not pointed to any such evidence found in the prior art and only has provided supposition, using the hindsight of having read

² *See also In Re Jones*, 958 F.2d 347, 351 (Fed. Cir. 1992) (“Conspicuously missing from this record is any evidence, other than the PTO’s speculation (if that can be called evidence) that one of ordinary skill in the herbicidal art would have been motivated to make the modification of the prior art salts necessary to arrive at” the claimed invention.).

the Applicants' invention, that the combination of the would be "effective." Therefore, Applicants respectfully submit that the suggestion or motivation required by M.P.E.P. § 2143.01 for the proposed combination does not exist, and the Examiner has failed to identify the source of such suggestion or motivation.

For at least these reasons Claims 1 and 16, as amended, are allowable in light of the references previously used to reject Claim 21. Therefore, Applicants respectfully request reconsideration and allowance of Claims 1 and 16, as well as the claims that depend from these independent claims.

Section 103 Rejections

The Office Action rejects Claims 2, 5, 7, 9-10, 17-18 and 20 under 35 U.S.C. § 103(a) as being unpatentable over *Thompson* in view of U.S. Patent No. 5,956,319 ("*Meli*"). The Office Action also rejects Claims 8 and 15 under 35 U.S.C. § 103(a) as being unpatentable over *Ester* view of U.S. Patent No. 6,337,755 to Cao ("*Cao*") and U.S. Patent No. 6,400,476 to Arecco ("*Arecco* '476"). Furthermore, the Office Action rejects Claims 12-14 under 35 U.S.C. § 103(a) as being unpatentable over *Ester* in view of *Arecco* '371.

Of the claims rejected above, Applicants have cancelled Claims 8-10, 13-14, 17, and 20 in this Response. Therefore, the rejection of these claims is now moot. With respect to remaining Claims 2, 5, 7, 12, and 18, each of these claims depends from either Claim 1 or Claim 16, which are shown above to be in condition for allowance. Therefore, Applicants respectfully request reconsideration and allowance of these claims.

In addition, the Office Action rejects Claims 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over *Thompson* in view of *Arecco* '371. The Office Action also rejects Claims 21 and 22 under 35 U.S.C. § 103(a) as being unpatentable over *Okazaki* in view of *Ester* '527.

Claim 21 has been amended to include limitations similar, although not identical, to those discussed in conjunction with Claims 1 and 16 above. For the same reasons given above with respect to those claims, Claim 21 is also in condition for allowance. Therefore,

Applicants respectfully request reconsideration and allowance of Claim 21, as well as Claim 22, which depends from Claim 21.

New Claims

Applicants have added new Claims 23-35. Of these new claims, Claims 23 and 34 are independent claims. Claims 23 and 34 are similar to Claims 1 and 16, respectively, except that the limitations relating to the optical drop coupler and drop terminals in Claims 1 and 16 (cited above) have been replaced with the following limitations in Claims 23 and 34:

an optical add coupler coupled between said multiplexer and said optical output terminal; and
one or more add terminals each coupled to said optical add coupler;
wherein said optical add coupler is operable to optically combine optical signals from said output of said multiplexer and from said add terminals in order to obtain said optical output signal for said optical output terminal.

For similar reasons as discussed above with respect to Claims 1 and 16, these new claims should also be allowable. Favorable action is respectfully requested.

CONCLUSION

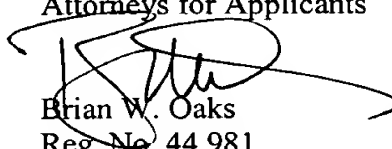
Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons and for other reasons clearly apparent, Applicants respectfully request reconsideration and full allowance of all pending claims.

If the Examiner feels that a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to contact Brian W. Oaks, Attorney for Applicants, at the Examiner's convenience at (214) 953-6986.

Although no fees are believed to be due, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

BAKER BOTTS L.L.P.
Attorneys for Applicants



Brian W. Oaks
Reg. No. 44,981

Date: September 21, 2004

Customer ID No. 05073